

CITY OF OREGON WATER TREATMENT PLANT

Drinking Water Consumer Confidence Report

For 2018

The Oregon Water Treatment Plant's drinking water continues to surpass all federal and state drinking water standards. In 2018 we had an unconditioned license to operate our water system.

The City of Oregon has prepared the following report to provide information to you, the consumer, on the quality of our drinking water. Included within this report is general health information, water quality test results, how to participate in decisions concerning your drinking water and water system contacts.

Public participation and comment are encouraged at regular meetings of City Council which meets on the second and fourth Monday's of each month at 8:00 PM. For more information on your drinking water contact Doug Wagner, Superintendent of Water Treatment at 419-698-7123.

Source Water Information

The City of Oregon Public Water System uses surface water drawn from an intake located in Lake Erie near Reno Beach. For the purposes of source water assessments, all surface waters in Ohio are considered highly susceptible to contamination. By their nature, surface waters are accessible and can be readily contaminated by chemicals and pathogens, with relatively short travel times from source to intake increases the susceptibility of the source water to contamination. The City of Oregon Public Water System's drinking water source protection area is susceptible to contamination from industrial wastewater, combined sewer or sewage treatment and urban areas, oil and gas production and mining operations and accidental releases and spills, especially from commercial shipping operations and recreational boating.

Source Water Assessment

The City of Oregon Public Water System treats water to meet drinking water quality standards, but no single treatment protocol can address all potential contaminants. The potential for water quality impacts can be further decreased by implementing measures to protect Lake Erie. More detailed information is provided in the City of Oregon Public Water System's Drinking Water Source Water Assessment report. Should you need to find your Source Water Assessment Information, the report can be accessed at Ohio EPA's website, utilizing the Interactive Web Map located at <http://epa.ohio.gov/ddagw/swap.aspx> -and- selecting "Drinking Water Source Assessment Reports" in the box under the "Quick Links". When the map appears, you can search by your water system name or by your 7-digit PWS ID number which is OH4800911 for the City of Oregon. The City of Oregon also has an emergency connection with the City of Toledo. During 2018 we used no water from this connection over the entire year. On average, this connection is used for approximately 0 days each year. This report does not contain information on the water quality received from the City of Toledo but a copy of their consumer confidence report can be obtained by contacting them directly.

Required health Information

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include: (A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife;

Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming; (C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses; (D) Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems; (E) Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, USEPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Federal Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons, such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infection. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

The EPA requires regular sampling to ensure drinking water safety. The City of Oregon conducted sampling for bacteria, inorganic, synthetic organic, and volatile organic's during 2018. The Ohio EPA requires us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though accurate, are more than one year old.

Turbidity

Turbidity is a measure of the cloudiness of water and is an indication of the effectiveness of our filtration system. The turbidity limit set by the EPA is 0.3 NTU in 95% of the daily samples and shall not exceed 1 NTU at any time. As reported above, the City of Oregon's highest recorded turbidity result for 2018 was 0.20 NTU and lowest monthly percentage of samples meeting the turbidity limits was 100%.

Lead in Drinking Water

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of Oregon is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at 800-426-4791 or at <http://www.epa.gov/safewater/lead>.

Revised Total Coliform Rule

This Consumer Confidence Report (CCR) reflects changes in drinking water regulatory requirements during 2017. All water systems were required to comply with the Total Coliform Rule from 1989 to March 31, 2016, and begin compliance with a new rule, the Revised Total Coliform Rule, on April 1, 2016. The new rule maintains the purpose to protect public health by ensuring the integrity of the drinking water distribution system and monitoring for the presence of total coliform bacteria, which includes E. coli bacteria. The U.S. EPA anticipates greater public health protection under the new rule, as it requires water systems that are vulnerable to microbial contamination to identify and fix problems. As a result, under the new rule there is no longer a maximum contaminant level violation for multiple total coliform detections. Instead, the new rule requires water systems that exceed a specified frequency of total coliform occurrences to conduct an assessment to determine if any significant deficiencies exist. If found, these must be corrected by the PWS.

Customer Billing Benefits and Options

Contact the Water Office at 419-698-7039 for:

- 25% off water rates if you qualify for the real estate tax Homestead Credit.
- Direct payment of Water / Sewer Bills from checking or savings accounts.
- Any differences in water meter and remote meter readings (avoid any billing surprises by periodically checking readings)
- No charge installation of an Electronic Reading Transmitter (ERT) to broadcast your meter reading to our portable readers. There is no need for any external devices on your home. New installations and service calls will be automatically upgraded to this new service. Once installed there is no indoor access needed to read your water meter.
- Credit Card Payments may also be made on the City Website @ www.oregonohio.org by choosing **City Departments, Pay Utilities, Credit Card Payment, and Pay Now.**

Did You Know ?

- Drop box is located outside East entrance for after hour payments.
- We automatically use your winter quarter's water consumption to calculate your sewer bill during the summer's high water usage period. We just need an actual winter consumption reading. You can reach the Water Billing office Monday through Friday, 8:00 A.M. through 4:30 P.M. at 419-698-7039, or visit our web site at www.oregonohio.org , City Departments, Utilities for additional information about the Water Billing Office, Water Treatment Plant, and the water serving our community.
- The Electronic Reading Transmitter (ERT) has a built in leak detector on the water meter.
- Most City Departments are also accepting credit card payments. To make a credit card payment, please contact the department directly for instructions.

Clear Choices Clean Water

Most pollution is caused by humans, and everyone is responsible for doing something about it. The City of Oregon is a proud partner in the Clear Choices Clean Water program, an initiative that promotes making a few small changes around your home, business, and community to help make a positive difference in water quality. The Clear Choices Clean Water website provides a variety of resources to help you learn more about water conservation, native plants and rain gardens, lawn fertilizers, and many more ways to protect water quality. The interactive website also features a pledge option that calculates the specific amount of pollution you've prevented and has a map feature that shows you who else in your community is doing their part for water quality! Please visit <http://toledolakeerie.clearchoicescleanwater.org/>

Take an Action Pledge Today! Be part of a fast-growing movement around the region to help make simple choices to protect local water resources. Post your water quality choices (pledges) to your social media and invite other friends and family to join you in your effort! Please visit <http://toledolakeerie.clearchoicescleanwater.org/service/pledge>.

The everyday choices that we make will not only help to improve the water quality of Maumee Bay for swimming and fishing, but will also help to control water treatment costs. For more information about the City's Storm Water Management Program, please see our website at www.oregonohio.org/Engineering/storm-water-management-plan.html or give us a call at (419) 698-7047.

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2018

CONSUMER CONFIDENCE REPORT DATA

The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. The Ohio EPA requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently.

Contaminant (units)	MCLG	MCL	Level Found	Range of Detection / Findings	Violation	Sample Year	Typical Source of Contaminants
Microbiological Contaminants							
Total Organic Carbon	NA	TT	1.8	1.1 - 2.2	No	2018	Naturally present in the environment
Turbidity (NTU)	NA	TT	0.11	0.04 - 0.20	No	2018	Soil runoff
Turbidity (% samples meeting standard)	NA	TT	100%	100%	No	2018	Soil runoff
Inorganic Contaminants							
Fluoride at Plant Tap (ppm)	4	4	0.93	0.62 - 1.10	No	2018	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate (ppm)	10	10	3.99	ND – 4.06	No	2018	Runoff from fertilizer use; Leaching from septic tanks; sewage; Erosion of natural deposits
Barium (ppm)	2	2	0.011	NA	No	2018	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Lead and Copper							
Contaminants (units)	Action level (AL)	Individual Results over the AL	90% of the levels were less than	Violation	Sample Year	Typical source of Contaminants	
Lead (ppb)	15 ppb	NA	< 4	No	Jan-Jun 2018	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives	
0 samples were found to have lead levels in excess of the lead action level of 15 ppb.							
Copper (ppm)	1.3 ppm	NA	0.02	No	Jan-Jun 2018	Erosions of natural deposits; leaching from wood preservatives; Corrosion of household plumbing systems	
0 samples were found to have lead levels in excess of the lead action level of 1.3 ppm.							
Lead (ppb)	15 ppb	NA	< 4	No	Jul-Dec 2018	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives	
0 samples were found to have lead levels in excess of the lead action level of 15 ppb.							
Copper (ppm)	1.3 ppm	NA	0.18	No	Jul-Dec 2018	Erosions of natural deposits; leaching from wood preservatives; Corrosion of household plumbing systems	
0 samples were found to have lead levels in excess of the lead action level of 1.3 ppm.							

Residual Disinfectants							
	MRDLG	MRDL	Level Found	Range of Detection	Violation	Sample Year	Typical Source of Contaminants
Total Chlorine	4	4	1.6	1.2 - 1.9	No	2018	Water additive used to control microbes
Disinfection By Products							
TTHMs [Total Trihalomethane] (ppb)	NA	80	45.98	27.6-58.1	No	2018	By-product of drinking water chlorination
Bromodichloromethane (ppb)	NA	NA	12.5	5.3 - 15.6	No	2018	By-product of drinking water chlorination
Bromoform (ppb)	NA	NA	0.4	ND - 1.4	No	2018	By-product of drinking water chlorination
Chloroform (ppb)	NA	NA	47.7	15.7 - 73.6	No	2018	By-product of drinking water chlorination
Dibromochloromethane (ppb)	NA	NA	4.5	2.1 - 5.8	No	2018	By-product of drinking water chlorination
Haloacetic Acids (HAA5) (ppb)	NA	60	11.9	5.6-15.3	No	2018	By-product of drinking water chlorination
Unregulated Contaminants (UCMR4)							
Contaminant (units)	MCLG	MCL	Level Found	Range	Sample Location	Sample Year	Typical Source of Contaminants
Methoxyethanol (ug/L)	NA	NA	0.90	ND – 3.59	Entry Point	2018	Solvent for many different purposes such as varnishes, dyes, and resins. It is also used as an additive in airplane deicing solutions.
Bromide (ug/L)	NA	NA	37.08	29.1 - 47.1	Source Water	2018	Erosion of earth materials and contribution from brines
Haloacetic Acids (HAA5) (ppb)	NA	60	13.98	2.61 – 19.26	Distribution	2018	By-product of drinking water chlorination
Haloacetic Acids (HAA6Br) (ppb)	NA	NA	7.35	2.27 – 11.80	Distribution	2018	By-product of drinking water chlorination
Haloacetic Acids (HAA9) (ppb)	NA	NA	19.76	4.44 – 28.94	Distribution	2018	By-product of drinking water chlorination
<p>Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. In 2018 The City of Oregon participated in the fourth round of the Unregulated Contaminant Monitoring Rule (UCMR 4). For a copy of the results please call Doug Wagner at 419-698-7117.</p>							

Definitions

- **Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
- **Maximum Contaminant level (MCL):** The highest level of contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
- **Maximum Residual Disinfectant Level (MRDL):** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
- **Maximum Residual Disinfectant Level Goal (MRDLG):** The level of drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
- **Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- **Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.
- **Contact Time (CT)** means the mathematical product of a “residual disinfectant concentration” (C), which is determined before or at the first customer, and the corresponding “disinfectant contact time” (T).
- **Microcystins:** Liver toxins produced by a number of cyanobacteria. Total microcystins are the sum of all the variants/congeners (forms) of the cyanotoxin microcystin.
- **Cyanobacteria:** Photosynthesizing bacteria, also called blue-green algae, which naturally occur in marine and freshwater ecosystems, and may produce cyanotoxins, which at sufficiently high concentrations can pose a risk to public health.
- **Cyanotoxin:** Toxin produced by cyanobacteria. These toxins include liver toxins, nerve toxins, and skin toxins. Also sometimes referred to as “algal toxin”.
- **Parts per Million (ppm) or Milligrams per Liter (mg/L)** are units of measure for concentration of a contaminant. A part per million corresponds to one second in a little over 11.5 days.
- **Parts per Billion (ppb) or Micrograms per Liter ($\mu\text{g/L}$)** are units of measure for concentration of a contaminant. A part per billion corresponds to one second in 31.7 years.
- **The “<” symbol:** A symbol which means less than. A result of <5 means that the lowest level that could be detected was 5 and the contaminant in that sample was not detected.